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Client/Matter: 081468-0304886

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A computer-implemented method of scheduling one or more maintenance actions in at least a part of a substrate processing system, comprising:
 - determining a gap in the flow of substrates in a part of the substrate processing system, other than a gap in the flow of substrates caused at introduction of substrates into the substrate processing system; and
 - scheduling one or more maintenance actions to be performed in a ~~another~~ part of the substrate processing system during a period associated with the gap.
2. (Original) The method according to claim 1, wherein determining a gap comprises monitoring for a gap in the flow of substrates through the substrate processing system.
3. (Currently Amended) The method according to claim 1, wherein the gap is determined using information about the performance of ~~at least one of~~ a maintenance action, and another activity provided by one or more parts of the substrate processing system, or both.
4. (Currently Amended) The method according to claim 1, wherein the gap is determined using a scheduler and the method further comprises controlling the performance of the one or more maintenance actions in a ~~the another~~ part of the substrate processing system using the scheduler.
5. (Currently Amended) The method according to claim 1, wherein the flow of substrates in all or part of the substrate processing system is stopped upon the occurrence of the gap and said scheduling comprises scheduling one or more maintenance actions to be performed in at least a part of the substrate processing system such that the one or more maintenance actions occur at least partly in parallel with the gap.
6. (Original) The method according to claim 1, wherein the flow of substrates continues in another part of the substrate processing system upon the occurrence of the gap and said

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scheduling comprises scheduling one or more maintenance actions to be performed when at least a part of the gap is at a part of the substrate processing system where the scheduled one or more maintenance actions are to be performed.

7. (Original) The method according to claim 1, wherein said substrate processing system comprises a lithographic apparatus and a track.

8. (Original) The method according to claim 5, wherein said scheduling is performed externally from the lithographic apparatus and the track.

9. (Currently Amended) A computer program product to schedule one or more maintenance actions in at least a part of a substrate processing system, comprising:

- software code configured to determine a gap in the flow of substrates in a part of the substrate processing system, other than a gap in the flow of substrates caused at introduction of substrates into the substrate processing system; and
- software code configured to schedule one or more maintenance actions to be performed in a another part of the substrate processing system during a period associated with the gap.

10. (Original) The computer program product according to claim 9, wherein the code configured to determine a gap comprises code configured to monitor for a gap in the flow of substrates through the substrate processing system.

11. (Currently Amended) The computer program product according to claim 9, wherein the code configured to determine a gap comprises code to determine the gap using information about the performance of ~~at least one of~~ a maintenance action, ~~and~~ another activity provided by one or more parts of the substrate processing system, or both.

12. (Currently Amended) The computer program product according to claim 9, comprising a scheduler configured to determine the gap and to control the performance of the one or more maintenance actions in a the another part of the substrate processing system.

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13. (Currently Amended) The computer program product according to claim 9, wherein the flow of substrates in all or part of the substrate processing system is stopped upon the occurrence of the gap and said code configured to schedule comprises code configured to schedule one or more maintenance actions to be performed in at least a part of the substrate processing system such that the one or more maintenance actions occur at least partly in parallel with the gap.

14. (Original) The computer program product according to claim 9, wherein the flow of substrates continues in another part of the substrate processing system upon the occurrence of the gap and said code configured to schedule comprises code configured to schedule one or more maintenance actions to be performed when at least a part of the gap is at a part of the substrate processing system where the scheduled one or more maintenance actions are to be performed.

15. (Original) The computer program product according to claim 9, wherein said substrate processing system comprises a lithographic apparatus and a track.

16. (Original) The computer program product according to claim 15, wherein said computer program product is operated externally from the lithographic apparatus and the track.

17. (Currently Amended) A lithographic apparatus comprising:

- an illumination system configured to provide for providing a projection beam of radiation;
- a support structure configured to support for supporting a patterning device, the patterning device configured serving to pattern the projection beam according to a desired pattern;
- a substrate table configured to hold for holding a substrate;
- a projection system configured to project for projecting the patterned beam onto a target portion of the substrate; and
- a processing unit configured to determine a gap in the flow of substrates in a part of a substrate processing system, other than a gap in the flow of substrates caused at introduction of substrates into the substrate processing system, and to schedule one or more maintenance actions to be performed in the lithographic apparatus during a period associated with the gap.

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18. (Original) The lithographic apparatus according to claim 17, wherein the processing unit is configured to monitor for a gap in the flow of substrates through the substrate processing system.

19. (Currently Amended) The lithographic apparatus according to claim 17, wherein the processing unit is configured to determine the gap using information about the performance of ~~at least one of~~ a maintenance action, ~~and~~ another activity provided by one or more parts of the substrate processing system, or both.

20. (Original) The lithographic apparatus according to claim 17, wherein the processing unit comprises a scheduler, the scheduler being configured to determine the gap and to control the performance of the one or more maintenance actions in the lithographic apparatus.

21. (Original) A track comprising:

- a coater configured to apply a layer of radiation-sensitive material to a substrate;
- a developer configured to develop an exposed substrate; and
- a processing unit configured to determine a gap in the flow of substrates in a part of a substrate processing system and to schedule one or more maintenance actions to be performed in the track during a period associated with the gap.

22. (Currently Amended) The track according to claim 21, wherein the processing unit is configured to monitor for a gap in the flow of substrates through the substrate processing system.

23. (Currently Amended) The track according to claim 21, wherein the processing unit is configured to determine the gap using information about the performance of ~~at least one of~~ a maintenance action, ~~and~~ another activity provided by one or more parts of the substrate processing system, or both.

24. (Original) The track according to claim 21, wherein the processing unit comprises a scheduler, the scheduler configured to determine the gap and to control the performance of the one or more maintenance actions in the track.

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25. (Currently Amended) A computer-implemented method for initiating execution of maintenance actions in a track and a lithographic apparatus, comprising:
- determining a gap in the flow of substrates in a part of one of the track and the lithographic apparatus, other than a gap in the flow of substrates caused at introduction of substrates into the track and lithographic apparatus; and
 - scheduling one or more maintenance actions to be performed in a part of the other of the track and the lithographic apparatus during a period associated with the gap.
26. (New) The method according to claim 25, wherein determining a gap comprises monitoring for a gap in the flow of substrates through the track, the lithographic apparatus or both.
27. (New) The method according to claim 25, wherein the gap is determined using information about the performance of a maintenance action, another activity provided by one or more parts of the track and/or the lithographic apparatus, or both.
28. (New) The method according to claim 25, wherein the gap is determined using a scheduler and the method further comprises controlling the performance of the one or more maintenance actions in the other of the track and the lithographic apparatus using the scheduler.
29. (New) The method according to claim 28, wherein said scheduling is performed externally from the lithographic apparatus and the track.
30. (New) The method according to claim 25, wherein the flow of substrates in all or part of the track, the lithographic apparatus, or both is stopped upon the occurrence of the gap and said scheduling comprises scheduling one or more maintenance actions to be performed in the other of the track and the lithographic apparatus such that the one or more maintenance actions occur at least partly in parallel with the gap.
31. (New) The method according to claim 25, wherein the flow of substrates continues in another part of the substrate processing system upon the occurrence of the gap and said

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scheduling comprises scheduling one or more maintenance actions to be performed when at least a part of the gap is at a part of the substrate processing system where the scheduled one or more maintenance actions are to be performed.